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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/662,534

09/16/2003

Kaoru Iwato

Q77005

9429

23373 7590 03/22/2007  
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EXAMINER

GILLIAM, BARBARA LEE

ART UNIT

PAPER NUMBER

1752

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/22/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

5

**Office Action Summary**

Application No.

10/662,534

Applicant(s)

IWATO ET AL.

Examiner

Barbara L. Gilliam

Art Unit

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11, 13, 14 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) 2-5, 7-10 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11, 13, 14 and 16-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date 3/11/2005.
- 4) ☐ Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The IDS filed March 11, 2005 has been entered and fully considered. An initialed and signed copy is attached herewith.

### ***Response to Amendment***

2. The amendment filed December 8, 2006 has been entered and fully considered.
3. The rejection of claims 16 and 17 under 35 USC 112, 2<sup>nd</sup> paragraph is withdrawn in light of the amendment.
4. The rejection under 35 USC 102(b) over NAKAMURA et al., EP 945 264 A1 is withdrawn.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

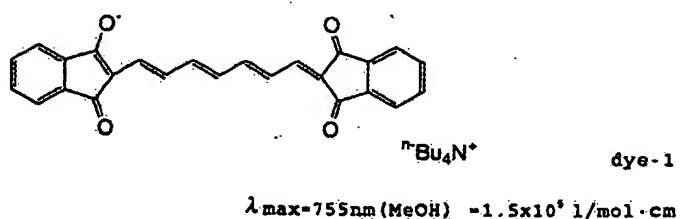
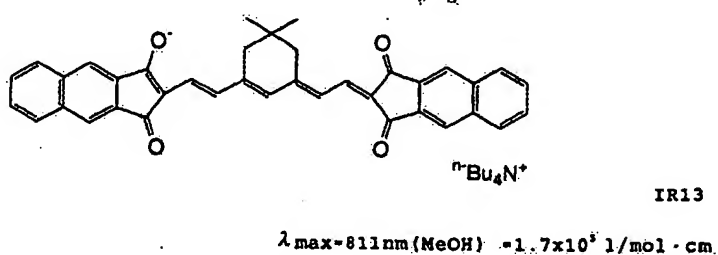
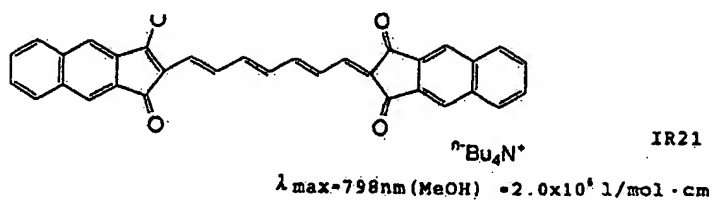
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 11, 13-14, 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over NAKAMURA et al., EP 945 264 A1.

- a. NAKAMURA et al. teach a positive-type photosensitive composition comprising an anionic, infrared-ray absorbing agent and a polymeric compound that is

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insoluble in water but soluble in an aqueous alkaline solution (abstract). Specific examples of the anionic dye include

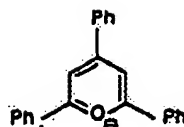
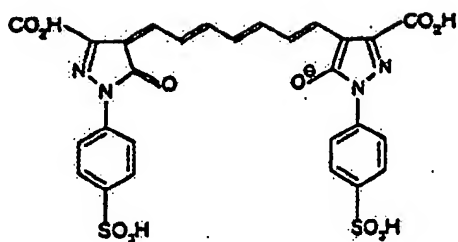


NAKAMURA et al. teach with sufficient specificity that that the composition may further contain a pigment or dye capable of absorbing infrared rays. It would have been obvious to one of ordinary skill in the art to add a pigment or dye capable of absorbing infrared rays in order to improve the image-forming performance ([0086]). NAKAMURA et al. also specifically teach the following anionic, infrared absorbing dyes

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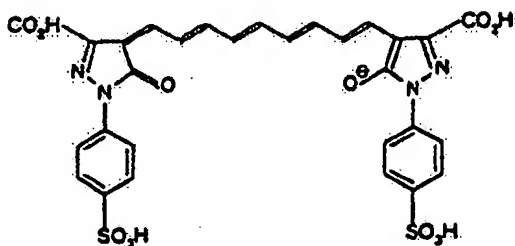
(IR-24)

(7)



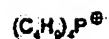
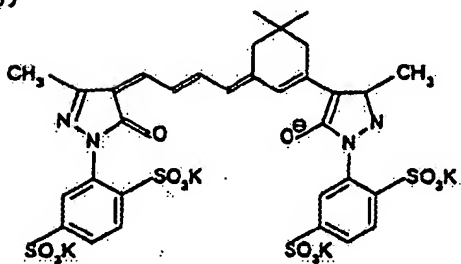
(IR-25)

(9)



(IR-26)

(7)



which meet the structural requirements of  $R^A-SO_3^-$  and  $Ar^B-SO_3^-$  of general formulae (2-A) and (2-B) respectively but do not comprise the quarternary ammonium counter ion of  $M_1^+$  (page 47-48). \* However, based on the overall teachings of the patent, it would

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have been obvious to of ordinary skill in the art to use an onium salt counter ion, such as a quaternary ammonium cation so as to exemplify the positive image formation ([0060]). \*It is the Examiner's position the cited compounds of NAKAMURA et al. contain protons that are readily dissociated and the corresponding compounds comprising  $\text{SO}_3^-$  are in equilibrium with the compounds containing  $\text{SO}_3\text{H}$ . Also the negative charge is able to be delocalized which results in a more stable compound.

### ***Response to Arguments***

7. Applicant's arguments, filed December 8, 2006 have been fully considered and are persuasive in part. The rejection under 35 USC 112, 2<sup>nd</sup> paragraph is withdrawn and the rejection under 35 USC 102(b) over NAKAMURA et al., EP 945 264 A1 is withdrawn. However the rejection under 35 USC 103(a) over NAKAMURA et al., EP 945 264 A1 is maintained. Again, it is the Examiner's position that is would have been obvious to one of ordinary skill in the art to use an onium salt counter ion, such as a quaternary ammonium cation taught by NAKAMURA et al. Applicant argued the cited compounds of NAKAMURA et al. (IR-24, IR-25 and IR-26) do not meet the structural requirements of the present compounds because said present compounds require  $\text{SO}_3^-$ . It is the Examiner's position the cited compounds of NAKAMURA et al. contain protons that are readily dissociated and the corresponding compounds comprising  $\text{SO}_3^-$  are in equilibrium with the compounds containing  $\text{SO}_3\text{H}$ . Also the negative charge is able to be delocalized which results in a more stable compound. Applicant argued unexpected result however more explanation of the data is necessary to fully evaluate the results

including an explanation of how the inventive examples are commensurate in scope with the pending claims.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara L. Gilliam whose telephone number is 571-272-1330. The examiner can normally be reached on Monday through Thursday, 8:00 AM - 5:30 PM.

a. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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b. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Barbara L. Gilliam  
Primary Examiner  
Art Unit 1752

bg  
March 19, 2007